

ABSTRACT

A method and apparatus are provided for compressing and using a concatenative speech database in TTS systems to improve the quality of speech output generated by handheld TTS systems by allowing synthesis to occur on the client. According to one embodiment of the present invention, a G.723 encoder receives diphone waveforms, and compresses them into diphone residuals. While compressing the diphone waveforms, the encoder generates Linear Predictive Coding (LPC) coefficients. The diphone residuals, and the encoder-generated LPC coefficients are then stored in encoder-generated compressed packet.